APPENDIX A

IN THE

DISTRICT COURT OF THE UNITED STATES
FOR THE SOUTHERN DISTRICT OF OHIO
EASTERN DIVISION

Civil No. 67-376

PARKER SWEEPER COMPANY,

Plaintiff,

v.

THE E. T. RUGG COMPANY,

Defendant.

(Filed March 4, 1972)

I

FINDINGS OF FACT

(1) This is an action for infringement of United States Patent No. 3035294 and Design Patent No. 194051. Both patents were granted jointly to Theophilus P. R. Stout and Warner Houser under the following circumstances: '294 was applied for on August 17, 1959. The patent was issued on May 22, 1962, for "Sweeper with hand actuated rear dumping debris receptacle" for the period ending May 21, 1979. Patent '051 was applied for January 18, 1960, and granted November 13, 1962, for "Lawn Sweeper," for a period of fourteen years to expire on November 12, 1974. Both patents relate to lawn sweepers; '294 to its structure and '051 to its appearance.

(2) Plaintiff Parker Sweeper Company is an Ohio corporation and is the owner by assignment of both of the foregoing patents. Defendant The E. T. Rugg Company, a division of A.T.O., Inc., is an Ohio corporation having a regular and established place of business located in Newark, Ohio, within the Eastern Division of the Southern District of Ohio.

(3) This Court has jurisdiction both as to the parties involved and the subject matter in accordance with Title 28, U.S.C.A. 1338(a) and 1400(b) and under the patent laws of the United States, Title 35, U.S.C.A., Sections 101, 102, 103, 271, 282, 283, 284 and 285.

(4) Patent '294 described a lawn sweeper designed to be pulled by a home garden tractor. It contains a pivoted dumping debris receptacle actuated by the pulling of a cord, which causes the receptacle to rotate in a counterclockwise fashion until emptied.

The sweeper consists of: "A cart frame having a pair of spaced upright side sections with axle means at the front and rear, such axle means supporting ground engaging wheels; a rotary work element carried by the front of the frame and arranged to sweep debris into an open front and open top debris receptacle, pivotally mounted between the frame sections; the pivotal support for the receptacle being so arranged that it is forward of the receptacle center of gravity so that when an operator sitting on the tractor seat pulls the cord attached to the top of the receptacle, such receptacle will automatically return to its debris-receiving position when the operator releases the cord."

(5) Of the four claims of the '294 patent, plaintiff relied at the trial only on claim 3, which is as follows:

> (3) A lawn sweeper comprising in combination a cart, including a frame, having spaced upright

side sections, axle means at the front of the frame, wheels on said axle means, axle means at the rear of the frame, wheels on the second mentioned axle means, a machine head carried by the front of the frame, between the side sections and including a rotatable work element; bearing means adjacent the top and rear of each section of the frame sections and disposed forwardly of the rear wheels, the axex of said bearing means being aligned and disposed transversely of the direction of movement of the cart on the wheels; an open front and open top debris receptacle disposed between the frame sections and including axle means cooperating with the bearing means for pivotally supporting the debris receptacle, the axle means for the debris receptacle lying forwardly of the center of gravity of the receptacle in all positions to which the receptacle can be moved.

(6) The design '051 patent claims the ornamental design and appearance of plaintiff's sweeper. It, in usual design patent fashion, contains a single claim which is as follows:

> "The ornamental design for a lawn sweeper as shown and described."

(7) Parker Sweeper Company and its predecessor have engaged in the manufacture of lawn sweepers since 1919. Early sweepers were hand pushed with a fixed debris receptacle. Such receptacle could only be emptied by overturning the sweeper or, when so equipped, by removing a bailing liner therefrom. Plaintiff had marketed a large sweeper pulled by a tractor. This sweeper was unsatisfactory for home use, since its size required a large tractor and two men to remove the debris collecting bailing liner.

(8) In 1960 plaintiff placed on the market its "Trailette," and "Hitch and Sweep" models. These models were identified at trial as plaintiff's exhibit 7 and defendant's exhibit B, respectively. Both models embody the teachings of the patents in question. At that time there were no other trailing dumpable lawn sweepers available for home use.

(9) Commercially, the models were a prompt and substantial success. From sales of non-dumpable trailing lawn sweepers of approximately 200 per year, the sales of plaintiff's sweepers increased to 13,000 per year. They satisfied a need in the home lawn garden market.

(10) Defendant began manufacturing a trailing dumpable lawn sweeper in 1966. Defendant's entire output is marketed by Sears Roebuck & Company under the brand name, "Craftsman." One of such sweepers was introduced at trial as Plaintiff's Exhibit 1.

(11) Plaintiff gave defendant actual notice in writing of its infringement of the patents '294 and '051 by letter dated August 25, 1967.

(12) Following such date, defendant continued to manufacture its trailing dumpable lawn sweeper and has manufactured it continuously to this date.

(13) There are presently five manufacturers of trailing dumpable lawn sweepers: Plaintiff, The Parker Sweeper Company; The E. T. Rugg Company, Defendant; Precision Products, Inc., holder of a license from plaintiff since 1968; Lambert, Inc., assignee of U. S. Patent No. 3597.786 and the Sarlo Corporation of Fort Myers, Florida.

(14) Precision Products, Inc. markets a Model TD-30-70 under a non-exclusive license under both of the patents in suit, granted by plaintiff in 1968.

(15) Defendant denies both validity of patent and infringement for the following reasons:

Appendix A

(a) The prior state of the art was such that each of the elements or mechanical equivalent thereof in plaintiff's patent may be found in prior patents and plaintiff's distinctions are mere mechanical design changes that would have been obvious to one having ordinary skill in the art.

(b) That portion of plaintiff's claim 3 which provides: "The axle means for the debris receptacle lying forwardly of the center of gravity of the receptacle in all positions to which the receptacle can be moved" has not been infringed by defendant's debris receptacle which can be rotated to positions where the center of gravity is moved forwardly of the axle means.

(16) A careful examination of patent '294 and those exhibits which demonstrated the device reveals that the trailing sweepers of both plaintiff and defendant consist of two functioning elements. Each has a brush rotating in a clockwise fashion, designed to remove debris from a lawn and a large canvas receptacle lying immediately behind said brush intended to collect the debris immediately after removal. Each sweeper is equipped with a cord enabling the debris receptacle to be rotated in a counterclockwise fashion until the debris, by force of gravity, drops to the ground. A release of the cord causes the receptacle to return to its initial position. Neither debris receptacle functions as such when placed in a position where its center of gravity is forward of the axle means. A device patented as a lawn sweeper should only be considered in the context of a functioning unit. Undeniably, defendant's sweeper is non-functioning whenever the center of gravity lies forward of the axle means.

(17) In support of its position denying the validity of plaintiff's patent, defendant has produced nine patents as

evidence of the state of the prior art. The parties have stipulated (R. 197) that such patents properly demonstrate the state of the prior art. These patents are as follows:

Patent No.	Inventor	Date	Exhibit No.
457693	Anderson	8/11/1891	A-4
517709	Tilton	3/3/1894	A-6
542571	Reynolds	7/9/1895	A-10
548659	Rogers	10/29/1895	A-11
703650	Gleason	7/1/1902	A-15
2700783	Parker, et al	2/1/1955	A-22
2727264	Dunham	12/20/1956	A-23
2737673	Parker, et al	3/13/1956	A-25
D151526	Parker	10/20/1948	A-27

These patents will be considered as follows:

(a) The four most recent patents, Parker 2700783, Dunham 2727264, Parker 2737673, and Parker D151526, each concern manually pushed lawn sweepers with fixed debris receptacles. They do not contemplate a pivotally supported debris receptacle. They suggest only the need for a better way to remove lawn debris. They do not require a detailed analysis.

(b) Patents Anderson 457693 and Reynolds 542571, Defendant's A-4 and A-10, relate to horse-drawn street sweepers. Tilton 517709 and Rogers 548659, defendant's exhibits A-6 and A-11, relate to manually pushed street sweepers and Gleason 703650, defendant's exhibit A-15, is concerned with an attachment for a lawn mower. These require a more detailed consideration.

The Anderson patent (A-4) operates in reverse of plaintiff's patent. The debris receptacle is forward of the rotating brush which operates in a counter-clockwise fashion and the bearing means for the debris receptacle is vertically movable in order to permit any dumping at all.

Reynolds (A-10) is also a horse-drawn street sweeper. It consists of a platform from which the various components are suspended rather than a pair of spaced upright side sections. This patent has but one set of wheels with a bearing means for the debris receptacle rearwardly of the rear wheels, as opposed to the position in plaintiff's patent where the receptacle is forward of the rear wheels.

Tilton patent 517709 (A-6) is a manually push street sweeper with a debris receptacle lying forward of the brush. The bearing means for pivotally supporting the debris receptacle are not at the top and rear of the side frame and a separate conveyor mechanism is utilized to carry debris from the brush upwardly and forwardly into the debris receptacle.

Rogers patent 548659 (A-11), is also a manually pushed street sweeper with a drive mechanism extending from the rotatable brush to the rear wheels of the sweeper. The "machine head" is not at the front of the side sections. The bearing means for the receptacle are not disposed near the top and rear of the side frame members. From an examination of this exhibit, it is clear that the debris receptacle is not an open top receptacle.

Gleason patent 703650, (A-15), is a lawn mower attachment. It performs no sweeping function. Clippings are deposited on a conveyor and moved upwardly and rearwardly until deposited in a receptacle. The bearing means for pivotally supporting the receptacle are disposed well rearwardly of the rear wheels of the device. Expert testimony at the trial indicated that in dumping the device the center of gravity of the receptacle was moved to a position forwardly of the axle means and to be returned to a debris-receiving position a rigid connecting link would be required.

The prior art as set forth in the above patents does not appear to be, both collectively and individually, the subject matter therein such as would make the patent in question obvious to a person having ordinary skill in the art.

(18) All of the nine patents relied upon by defendant as indicating the state of the prior art were classified by the United States Patent Office in the same classes and sub-classes as were the patents cited by the Patent Office Examiner during the prosecution of the application of the patent in question. No evidence was presented that the Examiner had not considered all of the patents cited prior to the approval of the patent in question.

(19) Precision Products, Inc., sought and received a non-exclusive license to manufacture a Trailette-type lawn sweeper. Rights were received by Precision Products under both the design and the structural patents until May 21, 1979, the expiration date of Patent '294 and four and one-half years after the termination of Patent '051. Design Patent '051 was not the significant patent in the agreement and an examination of plaintiff's exhibit 11 indicates that Precision modified the design itself to an extent comparable to defendant's design changes.

II

MEMORANDUM AND CONCLUSIONS OF LAW

Based upon the foregoing findings of fact, the Court determines the following conclusions of law:

(A) Patents 3035294 and 194051 are valid patents.

The tests for validity are set forth by statute. For a patent to issue there must be a finding of an invention which is new (35 U.S.C.A. §§ 101 and 102), useful (35 U.S.C.A. § 101) and "non-obvious" (35 U.S.C.A. § 103). See *Westwood Chemical Inc.* v. *Owens Corning Fiberglas*

Corp., 445 F.2d 911. Only the question of obviousness has been raised herein.

A three-step test has been established by the Sixth Circuit in determining the question of what constitutes "obviousness." *Westwood Chemical, Inc.* v. *Owens Corning Fiberglas Corp.*, 445 F.2d 911. The first step is a factual determination of the prior art; second, a factual determination of what, if any, improvement the patentee has made over the prior art; and third, a legal question of whether the improvement would have been obvious to one skilled in the art. Additionally, the Supreme Court in *Graham* v. *John Deere Company*, 383 U.S. 1 (1965), has indicated secondary considerations such as commercial success, long felt but unsolved needs, failures of others, etc., as relevant indicia of obviousness or non-obviousness. Such secondary considerations might also be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented. The state of the prior art has been indicated by the parties through the introduction in evidence of nine patents. They fall naturally into two categories; those of modern origin concerned exclusively with a non-dumpable manually pushed sweeper, and those of the nineteenth century addressed primarily to the unique problems of that era. The teachings of the prior art do include elements of the patent in question. It would be difficult indeed to imagine a mechanical device for the removal of debris and the deposit of such debris in a receptacle for later emptying that would not follow certain basic physical principles. The combination, however, of such established elements with a useful and novel result does create a patentable device, even though the elements of the combination are old and well known. *Simplicity Manufacturing Co.* v. *Quick Manufacturing, Inc.*, 355 F.2d 1012 (6th Cir.

1966); *Williams Manufacturing Company* v. *United Shoe Machinery Company*, 316 U.S. 364 (1942); *National Latex Products* v. *The Sun Rubber Company*, 274 F.2d 224 (6th Cir. 1959); *Pullman Co.* v. *Holley Manufacturing Co.*, 233 F.2d 71 (9th Cir. 1956), *cert. den.* 352 U.S. 952; *Maytag Company* v. *The Murray Corporation of America*, 318 F.2d 79 (6th Cir.).

Consideration of this problem by the Sixth Circuit in *Simplicity* evoked the following discussion:

> "We cannot say that the construction was the product of ordinary skill rather than inventive insight, since the record discloses that others without success, including the defendant, were attempting for some time to obtain a soil tilling machine which could be operated rearwardly without muscular effort. Others could have done it. It now looks simple. But the fact remains, none accomplished it before Kamlukin put together a combination of elements synchronized in a manner to achieve a result which for many years had been elusive to those trained in the art. . . . The fact that the problem was unsolved for so long in the face of all the industry's efforts over the years gives credence to plaintiff's contention that the Kamlukin combination was anything but obvious to those skilled in the art. It was Kamlukin's ingenuity and resourcefulness in combining the elements necessary which overcame the deficiences so long prevalent in the art. His ingenuity and resourcefulness brought about a result which the prior art inventors were unable to conceive or anticipate."

Similarly, plaintiff's patent synchronized elements of the prior art. But no one else had previously been able to do it.

The secondary considerations referred to in *Deere* reinforce the non-obviousness of plaintiff's patent. The move to suburbia following World War II created the enormous

and profitable home lawn and garden industry. The riding tractor made gross cutting chores substantially easier. There was needed only some device to remove the gross clippings after cutting during the summer and fallen leaves in the autumn. These tasks continued to be manual, time-consuming, and unpleasant. Defendant as a manufacturer of lawn mowers would have been at least cognizant of this problem. The fact is, however, that neither defendant nor anyone else solved this problem until plaintiff marketed its product and the depth of the felt need was immediately apparent. An increase in sales in excess of 6,000% is probably the best evidence available as to the commercial success of this invention.

The law is clear that a patent once issued is presumed valid, (35 U.S.C. § 282) and that a heavy burden of proof rests upon the party attempting to prove invalidity. *Westwood Chemical, Inc.* v. *Owens Corning, supra.* See, *Everwear, Inc.* v. *Wieboldt Stores, Inc.*, 427 F.2d 373 (7th Cir. 1970). There is a further presumption that patents not cited by the Patent Office but classified in the same classes and sub-classes as those which were cited are presumed to have been considered by the Patent Office and discarded as not pertinent. *Artmoore Company* v. *Dayless Mfg. Co.*, 208 F.2d 4 (7th Cir. 1954); *Elgen Mfg. Co.* v. *Grant Wilson, Inc.*, 285 F.2d 476 (7th Cir. 1961). The failure of the Patent Office to cite a prior art patent is not sufficient to establish obviousness. Such contention must be proved. *Preformed Line Products Co.* v. *Fanner Mfg. Co.*, 328 F. 2d 265 (6th Cir. 1964). The "heavy burden" imposed upon defendant in the proof of invalidity has not been sustained in this case. Tested by the standards in *Westwood Chemical, supra,* and *Deere, supra,* the Court finds that the patents in question are valid.

(B) The patent holder has not lost the protection of a valid patent by misuse thereof.

Weight has been attached to *Rocform Corporation* v. *Acitelli Standard Concrete Wall, Inc.*, 367 F.2d 678 (6th Cir. 1966) in claiming plaintiff has misused its patent. Reliance upon such authority is in this Court's opinion misplaced. We read *Rocform* as holding that a licensing agreement covering multiple patents cannot be used to extend the patent monopoly beyond the life of the most important patent. The fact situation herein is precisely the reverse. Defendant urges *Rocform* where the agreement terminates at the expiration of the most important patent. The design patent expires while the agreement is in effect; it is obvious that it is of substantially less importance than the structural patent. The design patent had such little interest to the licensee that the product marketed under the agreement differed markedly from that of plaintiff.

At the most, however, *Rocform* would require only a reformation of the license agreement and not a holding of patent invalidity. As the Court observed:

> "The license agreement can, of course, readily be amended. It seems clear to us that the district judge was correct in denying plaintiff the use of the equity powers of the Court until and unless it purges itself of the practice identified above as representing patent misuse. Citing *Preformed Line Products Co.* v. *Spanner Manufacturing Co.*, 225 F.Supp. 762 (N.D. Ohio 1962), *aff'd.* 328 F.2d 265 (6th Cir. 1964), *cert. den.* 379 U.S. 846.

For the reasons stated above, no such reformation will be required herein.

(C) Plaintiff's patent has been infringed by defendant.

The determination of infringement is basically one of substance rather than form. Words such as "equivalent"

or "substantial similarity," have been used to describe this concept. The question is not what minute similarities or differences the devices may have, but rather a consideration of the function and performance of each to discover whether one thing is substantially the same as another, if it performs substantially the same functions and in substantially the same way to obtain the same result. *Saco-Lowell Shops* v. *Reynolds*, 141 F.2d 587; *Hunt* v. *Armour & Company*, 9 F.Supp. 767, *aff'd.* 185 F.2d 722; *U.S. Rubber Company* v. *General Tire and Rubber Co.*, 128 F.2d 106 (6th Cir.); *Swan Carburetor Company* v. *General Motors Corporation*, 43 F.Supp. 499 (N.D. Ohio).

An infringer may not by making slight departures from limits set out in a claim, avoid such infringement. *Celluloid Corporation* v. *Libbey-Owens Ford Glass Company*, 40 F. Supp. 840; nor can an infringer retain the substance of an invention and thereby escape injunctive process. *U.S. Rubber Co.* v. *General Tire & Rubber Co.*, *supra.*

When considered in accordance with these authorities, the device of defendant is clearly an infringement. At most, defendant's device demonstrates changes of an insubstantial nature. Such changes do not interfere with the essential structure or the essential function. At most, they may be considered equivalents. Defendant, however, may not appropriate an invention through minor and insignificant changes in the device to avoid the patent. An infringement is established once a comparison of accused device with the patented one shows that both perform substantially the same functions in substantially the same way to obtain the same result. *F.M.C. Corporation* v. *F. E. Myers & Bro. Company*, 384 F.2d 4 (6th Cir. 1967).

Defendant's device does function in precisely the same fashion to achieve precisely the same results. It removes lawn debris by means of a brush, deposits it in a receptacle;

such receptacle can be emptied by a pull on a cord and returned to its original position by release of the cord. The arc of rotation is neither material nor substantially different. In any operating position, the plaintiff's and defendant's sweepers perform identical functions and it is in this context that clear infringement of a design patent does exist.

The standard for infringement of a design patent is in the eye of an ordinary observer. As such "ordinary observer," the Court finds beyond question that the designs are substantially the same in the general overall appearance. There is therefore an infringement also of the design patent. *Applied Arts Corporation* v. *Grand Rapids Metalcraft Corporation*, 67 F.2d 428 (6th Cir. 1933); *Tappan Co.* v. *General Motors Corporation*, 383 F.2d 888 (6th Cir. 1967); *Harris and Schaeffer* v. *Curtis Aero Car Company*, 69 F.2d 264 (5th Cir. 1934).

III

RELIEF

In accordance with the foregoing, the Court grants plaintiff the following relief:

(A) Damages:

35 U.S.C. § 284 places upon the Court a duty to award the claimant damages adequate to compensate for the infringement but in no event less than a reasonable royalty for the use made of the invention by the infringer together with interest and costs as fixed by the Court.

The existence of the Precision Products license assists the Court in this determination. By such license plaintiff in an arms length transaction had indicated its willingness to share the lawn sweeper market on a non-exclusive and non-limited basis. Plaintiff also indicated a reasonable

royalty therefor. The actual damages suffered by plaintiff is therefore a sum equal to five per cent (5%) of the factory net selling price of each trailing type sweeper structure manufactured by defendant on and after August 25, 1967. Defendant is hereby directed to submit to the Court within fifteen (15) days hereof a certified account of all such sweepers produced and the net selling price thereof. A subsequent supplementary order will be issued concerning interest and costs and the increase of damages, if any, as provided in said Section 284.

(B) Injunction:

Defendant, its officers, agents and employees, are hereby permanently enjoined from:

(1) Manufacturing, selling or offering for sale or use its trailing sweeper known as "Craftsman" or any other trailing sweeper manufactured by it under other trade name;

(2) Causing to be manufactured, sold or used or offered for sale or use any trailing sweeper embodying the construction of claim 3 of the '924 patent or Design Patent '051;

(3) Manufacturing, causing to be manufactured, selling, or offering for sale or use any product in infringement of Patent '924 and Design Patent '051;

(4) Otherwise directly or contributorily infringing claim 3 of the '924 patent or Design Patent '051.

It is so ORDERED.

United States District Judge

APPENDIX B

No. 72-1664

UNITED STATES COURT OF APPEALS
FOR THE SIXTH CIRCUIT

PARKER SWEEPER COMPANY,
Plaintiff-Appellee,

v.

THE E. T. RUGG COMPANY,
Defendant-Appellant.

Appeal From the United States District Court for the Southern District of Ohio

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Decided and Filed February 27, 1973.

Before: EDWARDS, CELEBREZZE and KENT, Circuit Judges.

EDWARDS, Circuit Judge. Appellant Rugg appeals from the District Court's findings of validity of two Parker Sweeper patents, Patent No. 3,035,294 (hereafter '294) and Design Patent No. 194,051 (hereafter '051), and from a judgment granting damages for infringement and enjoining Rugg from further infringement.

The crucial issue in this appeal concerning the '294 patent is whether or not Parker's combination patent for a towable, dumpable lawn-leaf sweeper is invalid because the invention it claimed was obvious under the then existing state of the art to one skilled in the art. Although the

issue is not without difficulty, we conclude that the combination patent '294 is invalid for obviousness.

At the outset we note that if the equities between these two adverse parties were all that was at issue, the balance in this record would strongly favor appellee Parker Sweeper for all the reasons cited by the District Judge. Appellant Rugg appeared to the District Judge (and appears to us) deliberately to have copied Parker Sweeper's commercially successful product. Appellant Rugg prevails not because of merit in its conduct, but because of the national policy of rewarding with patent monopoly only those advances which can properly be characterized as "inventions." U.S. Const. art. I, § 8; 35 U.S.C. §§ 101, 102, 103 (1970); *Sears, Roebuck & Co.* v. *Stiffel Co.*, 376 U.S. 225 (1964); *Cuno Engineering Corp.* v. *Automatic Devices Corp.*, 314 U.S. 84 (1941); *Hotchkiss* v. *Greenwood*, 52 U.S. (11 How.) 248 (1850).

The record in this case appears to us to present no important dispute of fact.

On the heels of the development of the small tractor and a lawn mower suitable for towing behind it, a need became apparent for a grass or leaf sweeper which could be similarly employed. Such sweepers were readily available in the art for adaptation to small tractors. But as the president of Parker Sweeper Company testified, they were difficult to dump, since most could be emptied only by turning them over or by lifting out some form of basket or bailing liner. Until Parker's sweeper (patented under the numbers '294 as to structure and '051 as to design) was placed on the market, there was no sweeper which the tractor operator could operate and dump at a desired spot without dismounting. With the production and marketing of Parker's '294 sweeper beginning in

1960, its sales of sweepers skyrocketed from 200 per year to over 13,000 per year. Understandably, Parker was concerned when appellee Rugg Company in 1966 began to manufacture a very similar sweeper and to sell it to Sears, Roebuck under the latter's Craftsman label. After warning Rugg of its claims of patent infringement, Parker began the instant litigation by a complaint alleging infringement by Rugg of both its patents and seeking injunctive relief and damages.

The case was tried fully and it appears to this court that only legal issues remain. With the exception of the last sentence of finding 17 (which we believe to be a conclusion of law), we accept the careful findings of fact of the District Judge. They certainly are not "clearly erroneous"—the standard by which we review them. FED. R. CIV. P. 52; *American Saint Gobain Corp.* v. *Armstrong Glass Co.*, 434 F.2d 1216, 1218 (6th Cir. 1970).

As we have indicated, we also agree with the District Judge that the Parker sweeper met the test of utility fully and had sufficient differences in its method of combination of previously known elements to pass the test of novelty.

Nor do we find any fault with the District Judge's statement of the law applicable to a determination of "obviousness":

> A three-step test has been established by the Sixth Circuit in determining the question of what constitutes "obviousness." *Westwood Chemical, Inc.* v. *Owens-Corning Fiberglas Corp.*, 445 F.2d 911 [6th Cir. 1971]. The first step is a factual determination of the prior art; second, a factual determination of what, if any, improvement the patentee has made over the prior art; and third, a legal question of whether the improvement would have been obvious to one skilled in the art. Additionally, the Supreme Court in *Graham*

> v. *John Deere Company*, 383 U.S. 1 (1965), has indicated secondary consideration such as commercial success, long felt but unsolved needs, failure of others, etc., as relevant indicia of obviousness or non-obviousness. Such secondary considerations might also be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented.

The rationale of the District Judge and of the appellees in dealing with the obviousness test is set forth as follows in the last sentence of finding 17:

> The prior art as set forth in the above patents does not appear to be, both collectively and individually, the subject matter therein such as would make the patent in question obvious to a person having ordinary skill in the art.

As we have indicated above, this sentence appears to be the ultimate conclusion of law which the District Judge subsequently supported with this reasoning under the heading of Conclusions of Law:

> The state of the prior art has been indicated by the parties through the introduction in evidence of nine patents. They fall naturally into two categories; those of modern origin concerned exclusively with a non-dumpable manually pushed sweeper, and those of the nineteenth century addressed primarily to the unique problems of that era. The teachings of the prior art do include elements of the patent in question. It would be difficult indeed to imagine a mechanical device for the removal of debris and the deposit of such debris in a receptacle for later emptying that would not follow certain basic physical principles. The combination, however, of such established elements with a useful and novel result does create a patentable device, even though the elements of the combination are old and well known.

Appendix B

The District Judge and appellants also rely strongly upon secondary considerations and the presumption of validity of a patent once issued:

> The secondary considerations referred to in Deere reinforce the non-obviousness of plaintiff's patent. The move to suburbia following World War II created the enormous and profitable home lawn and garden industry. The riding tractor made grass cutting chores substantially easier. There was needed only some device to remove the grass clippings after cutting during the summer and fallen leaves in the autumn. These tasks continued to be manual, time-consuming, and unpleasant. Defendant as a manufacturer of lawn mowers would have been at least cognizant of this problem. The fact is, however, that neither defendant nor anyone else solved this problem until plaintiff marketed its product and the depth of the felt need was immediately apparent. An increase in sales in excess of 6,000% is probably the best evidence available as to the commercial success of this invention.
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> The law is clear that a patent once issued is presumed valid, (35 U.S.C. § 282) and that a heavy burden of proof rests upon the party attempting to prove invalidity. *Westwood Chemical, Inc.* v. *Owens-Corning, supra* [445 F.2d 911 (6th Cir. 1971)].

Accepting, as we do, the findings of fact of the trial judge and the applicability of both the secondary considerations and the presumption just referred to, we are still unable to agree that the resulting product was "non-obvious" within the meaning of the constitutional and statutory scheme.

We believe this record and the District Judge's findings require the conclusion that *every* element critical to this patent was anticipated in one or more of the nine patents

as to which the parties stipulated. Although appellant's claims describe the sweeper brush and the mechanism which rotates it, it is too clear for argument that these features are anticipated by all nine of the described patents and many other sweepers.

The only "novelty" arguably described in the claims pertains to the dumping mechanism of the '294 sweeper. This is described in Claim 3:

> (3) A lawn sweeper, comprising in combination, a cart including a frame having spaced, upright side sections, axle means at the front of the frame, wheels on said axle means, axle means at the rear of the frame, wheels on the second mentioned axle means; a machine head carried by the front of the frame between the side sections and including a rotatable work element; bearing means adjacent the top and rear of each section of the frame sections and disposed forwardly of the rear wheels, the axes of said bearing means being aligned and disposed transversely of the direction of movement of the cart on the wheels; an open front and open top debris receptacle disposed between the frame sections and including axle means cooperating with the bearing means for pivotally supporting the debris receptacle, the axle means for the debris receptacle lying forwardly of the center of gravity of the receptacle in all positions to which the receptacle can be moved.

The '294 sweeper is pictured on opposite page—the top picture with the receptable in dumping position and the bottom in sweeping position.

Reduced to plain English, what this dumping device amounts to is a basket with an open top and front mounted on a frame behind a sweeper brush mechanism which propels swept debris into the basket. The basket is suspended from an axle mounted on pivots on the top part

of the frame so that the tractor operator may empty the loaded basket by pulling on a rope attached to the top of the rear side of the basket, thus causing the basket to tip or rotate forward on its axle, thereby dumping the debris through the open front of the basket. Upon release of the rope, the force of gravity returns the basket to its debris-receiving position.

Neither the basket, nor the frame, nor the axle, nor the pivot, nor the rope are claimed to be novel or patentable. The claim, of course, is that the combination of these elements as portrayed above is both ingenious and nonobvious, and that it met a felt need and achieved great commercial success.

We do not denigrate the importance of Parker's device merely because it is involved in the unglamorous task of waste removal. Waste removal is one of the most important of man's problems and its importance increases with the size of population and the complexity of our civilization. Waste removal is, however, also one of the most ancient of man's problems and as the District Judge noted, "It would be difficult indeed to imagine a mechanical

(ILLUSTRATION OMITTED)

Fig. 2

(ILLUSTRATION OMITTED)

Fig. 1

device for the removal of debris and the deposit of such debris in a receptacle for later emptying that would not follow certain basic physical principles."

Indeed, a number of the patents in the prior art demonstrated important aspects of Parker's combination.

Appendix B

The Anderson street sweeper (Pat. No. 457,693, District Court Exhibit A-4) shows gravity return of the receptacle after dumping. Specification forming part of Letters Patent No. 457,693, p. 2, lines 37-42, Aug. 11, 1891, Appendix p. 34.

The receptacle in the Tilton street sweeper (Patent No. 517,709, District Court Exhibit A-6) returned of its own weight to sweeping position after dumping. Specification forming part of Letters Patent No. 517,709, p. 1, lines 45-63, April 8, 1894, Appendix p. 38.

The receptacle employed in the Reynolds street sweeper (Patent No. 542,571, District Court Exhibit A-10) was "pivotably hung on pins secured in the sides of the frame." In addition its receptacle was adapted to "swing downwardly at its front end . . . and upwardly at its rear end to discharge the contents of the [receptacle] in the rear of the brushes between the wheels of the sweeper." Specification forming part of Letters Patent No. 542,571, p. 1, lines 54-64, July 9, 1893, Appendix p. 42.

In the Rogers street sweeper patent (Patent No. 548-659, District Court Exhibit A-11), the receptacle is referred to as the "receiver." Its function is described thus:

> The receiver 21 is adapted to be dumped at will, and for this purpose is mounted upon horizontal trunnions 22, supported on the ends of hangers 23, which project down from a crossbar 23^a on the main frame of the machine. This receiver 21 being thus adapted to be inverted may be moved to bring the receiving opening on the bottom, in order to empty its contents, by drawing a chain 24, whose upper end is held at convenient reach, as at 25. By the shape of the receiver 21 it is held in normal position by reason of its rear projection 26 and makes a tight connection with the collector 20 and receiver 21 and at the same time

affords a stop for the receiver in its return movement by curved edges 27, 28, against which the edges of the opening of receiver 21 abut. Specification forming part of Letters Patent No. 548,659, p. 1, lines 61-76, October 29, 1895, Appendix p. 48.

The Gleason lawn mower patent (Patent No. 703,650, District Court Exhibit A-15) discloses a dumpable receptacle which operates on much the same basic principle as the Parker dumping mechanism. Its receptacle follows the rotary mower which is towable. The dumping mechanism can be operated from the seat of a drawn mower. Dumping is accomplished, as it is with the Parker sweeper, by inverting the receptacle on its pivots. Specification forming part of Letters Patent No. 703,650, p. 2, lines 51-66, July 1, 1902, Appendix p. 57.

More could be added to this demonstration that every important element and every important function of the Parker sweeper had been employed in some machine at some time for some purpose. We do not ignore the facts that 1) frequently the receptacles referred to above were differently shaped to accomplish different purposes, 2) street sweepers operate differently from lawn sweepers, 3) hand pushed sweepers operate differently from power towed sweepers, and 4) that no one of the prior art patents shows all of the features of the Parker sweeper in the same combination.

What we do hold is that the state of the art included all of these patents and that a skillful mechanic setting out to build a towable dumpable lawn sweeper to be used in connection with a lawn mower tractor in the early 1960's could accomplish his mission without adding any "invention" to the art.

Appendix B

Article I, § 8 of the Constitution provides in part: "Congress shall have Power . . . To promote the Progress of Science and the useful Arts by securing for limited Times to . . . Inventors the exclusive Right to their respective . . . Discoveries." In pursuance of this authority Congress has adopted a statute which describes "invention" as to which a patent monopoly may issue in terms of "novelty," "utility," and "nonobviousness." 35 U.S.C. §§ 101, 102, 103 (1970).

We agree with the District Court that Parker's lawn sweeper passed the first two tests of novelty and utility. It still must survive the test of Sec. 103 which provides: "A patent may not be obtained . . . if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. . . ." 35 U.S.C. § 103 (1970). As Mr. Justice Black put the matter in 1964: "To begin with, a genuine 'invention' or 'discovery' must be demonstrated 'lest in the constant demand for new appliances the heavy hand of tribute be laid on each slight technological advance in an art.'" *Sears, Roebuck & Co.* v. *Stiffel Co.*, 376 U.S. 225, 230 (1964), and cases cited therein. It is against these standards that we review the validity of the instant patent and find it wanting.

As a matter of law, we hold that the Parker sweeper patent '294 is invalid because this record demonstrates a failure to meet the nonobviousness test of 35 U.S.C. § 103 (1970).

We likewise conclude that the Parker sweeper design patent '051 is invalid.

Appendix B

The statute under which this patent was issued provides:

§ 171. Patents for designs

Whoever invents any new, original and ornamental design for an article of manufacture may obtain a patent therefor, subject to the conditions and requirements of this title.

The provisions of this title relating to patents for inventions shall apply to patents for designs, except as otherwise provided. July 19, 1952, c. 950, § 1, 66 Stat. 805. 35 U.S.C. § 171 (1970).

In the leading case dealing with design patents the United States Supreme Court set the standards for review of patentability of a design:

> The acts of Congress which authorize the grant of patents for designs were plainly intended to give encouragement to the decorative arts . . . . And the thing invented or produced, for which a patent is given, is that which gives a peculiar or distinctive appearance to the manufacture, or article to which it may be applied, or to which it gives form. The law manifestly contemplates that giving certain new and original appearances to a manufactured article may enhance its salable value, may enlarge the demand for it, and may be a meritorious service to the public. It therefore proposes to secure for a limited time to the ingenious producer of those appearances the advantages flowing from them. . . . It is the appearance itself, therefore, no matter by what agency caused, that constitutes mainly, if not entirely, the contribution to the public which the law deems worthy of recompense. . . .
>
> We hold, therefore, that if, in the eye of an ordinary observer, giving such attention as a purchaser usually gives, two designs are substantially the same, if the resemblance is such as to deceive such an observer,

> inducing him to purchase one supposing it to be the other, the first one patented is infringed by the other. *Gorham Co.* v. *White*, 81 U.S. (14 Wall.) 511, 524-25, 528 (1871).

The issue in *Gorham* was Gorham's claim that its design patent was infringed. But this court has applied the *Gorham* "ordinary observer" standard to the issue of validity of a design patent.

> A design patent must be possessed of novelty; the adaptation of old devices to new purposes, however convenient or useful they may be in their new role, is not invention. . . . The degree of difference required to establish novelty occurs when the average observer takes the new design for a different, and not a modified already existing design. . . . The fact that a design may be distinguished from those found in the prior art does not import the required novelty and ornamentation; its overall aesthetic effect must represent a step which has required inventive genius beyond the prior art. *Thabet Mfg. Co.* v. *Kool Vent Metal Awning Corp.*, 226 F.2d 207, 212 (6th Cir. 1955).

Appellants claim that Parker Sweeper's '051 patented design is extremely similar in appearance to two of Parker's own sweepers which had long been on the market. We reproduce below four exhibits, the first being the Parker Sweeper '051 design under the challenge and then three prior designs in the prior art:

(ILLUSTRATION OMITTED)

Parker Sweeper—Design Patent No. 194,051
D. C. Exh. 6.

Appendix B

(ILLUSTRATION OMITTED)

Prior Art. Parker Sweeper
Patent No. 2,700,783—D. Ct. Exh. A-22

(ILLUSTRATION OMITTED)

Prior Art. Parker Sweeper
Patent No. 2,737,673—D. Ct. Exh. A-25

(ILLUSTRATION OMITTED)

Prior Art. Dunham Sweeper
Patent No. 2,727,264—D. Ct. Exh. A-23

We recognize, of course, that the '051 design differed from the others in both size and framing. But tested by the *Gorham* standard as applied in *Thabet* to the eye of the ordinary observer, the designs must be regarded as substantially the same. *Gorham Co.* v. *White*, 81 U.S. (14 Wall.) 511 (1871); *Tappen Co.* v. *General Motors Corp.*, 380 F.2d 888 (6th Cir. 1967); *Thabet Mfg. Co.* v. *Kool Vent Metal Awning Corp.*, 226 F.2d 207 (6th Cir. 1955).

The judgment of the District Court is reversed and the case is remanded for entry of an order dismissing the complaint on the ground that both patents at issue are invalid.

APPENDIX C

PATENT LAWS

35 U.S.C. 101 et seq.

§ 101. Inventions patentable.

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

§ 102. Conditions for patentability; novelty and loss of right to patent.

A person shall be entitled to a patent unless—

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent, or

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States, or

(c) he has abandoned the invention, or

(d) the invention was first patented or caused to be patented, or was the subject of an inventor's certificate, by the applicant or his legal representatives or assigns in a foreign country prior to the date of the application for patent in this country on an application for patent or inventor's certificate filed more than twelve months before the filing of the application in the United States, or

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or

(f) he did not himself invent the subject matter sought to be patented, or

(g) before the applicant's invention thereof the invention was made in this country by another who had not abandoned, suppressed, or concealed it. In determining priority of invention there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.

§ 103. Conditions for patentability; non-obvious subject matter.

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

§ 271. Infringement of patent.

(a) Except as otherwise provided in this title, whoever without authority makes, uses or sells any patented invention, within the United States during the term of the patent therefor, infringes the patent.

(b) Whoever actively induces infringement of a patent shall be liable as an infringer.

(c) Whoever sells a component of a patented machine, manufacture, combination or composition, or a material or apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the

same to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use, shall be liable as a contributory infringer.

(d) No patent owner otherwise entitled to relief for infringement or contributory infringement of a patent shall be denied relief or deemed guilty of misuse or illegal extension of the patent right by reason of his having done one or more of the following: (1) derived revenue from acts which if performed by another without his consent would constitute contributory infringment of the patent; (2) licensed or authorized another to perform acts which if performed without his consent would constitute contributory infringement of the patent; (3) sought to enforce his patent rights against infringement or contributory infringement.

§ 281. Remedy for infringement of patent.

A patentee shall have remedy by civil action for infringement of his patent.

§ 282. Presumption of validity; defenses.

A patent shall be presumed valid. Each claim of a patent (whether in independent or dependent form) shall be presumed valid independently of the validity of other claims; dependent claims shall be presumed valid even though dependent upon an invalid claim. The burden of establishing invalidity of a patent or any claim thereof shall rest on the party asserting it.

The following shall be defenses in any action involving the validity or infringement of a patent and shall be pleaded:

(1) Noninfringement, absence of liability for infringement, or unenforceability,

(2) Invalidity of the patent or any claim in suit on any ground specified in part II of this title as a condition for patentability.

(3) Invalidity of the patent or any claim in suit for failure to comply with any requirement of sections 112 or 251 of this title,

(4) Any other fact or act made a defense by this title.

In actions involving the validity or infringement of a patent the party asserting invalidity or noninfringement shall give notice in the pleadings or otherwise in writing to the adverse party at least thirty days before the trial. of the country, number, date, and name of the patentee of any patent, the title, date, and page numbers of any publication to be relied upon as anticipation of the patent in suit or, except in actions in the United States Court of Claims, as showing the state of the art, and the name and address of any person who may be relied upon as the prior inventor or as having prior knowledge of or as having previously used or offered for sale the invention of the patent in suit. In the absence of such notice proof of the said matters may not be made at the trial except on such terms as the court requires. (Amended July 24, 1965, Public Law 89-83, sec. 10, 79 Stat. 261.)

§ 283. Injunction.

The several courts having jurisdiction of cases under this title may grant injunctions in accordance with the principles of equity to prevent the violation of any right secured by patent, on such terms as the court deems reasonable.

§ 284. Damages.

Upon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement but in no event less than a reasonable royalty for the

use made of the invention by the infringer, together with interest and costs as fixed by the court.

When the damages are not found by a jury, the court shall assess them. In either event the court may increase the damages up to three times the amount found or assessed.

The court may receive expert testimony as an aid to the determination of damages or of what royalty would be reasonable under the circumstances.

§ 285. Attorney fees.

The court in exceptional cases may award reasonable attorney fees to the prevailing party.